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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,875	11/20/2001	Bruce A. Judson	000192C1	1495

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

DANIEL JR, WILLIE J

ART UNIT	PAPER NUMBER
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2686

5

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,875

Applicant(s)

JUDSON ET AL.

Examiner

Willie J. Daniel, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to because of **Form PTO-948** (see sections 10 and 12). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. Figure 1 (see pg. 2, lines 24-25; pg. 4, [0011]) should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "100, 110, 120, 130, 140" has been used to designate both "steps of Fig. 1" and "components of Fig. 4". Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any

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portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: Application No. for related application is not included on pg. 1, line 10. Appropriate correction is required.

Double Patenting

5. **Claims 1-21** are directed to the same invention as that of **claims 1-21** of commonly assigned **Application No. - 09/998,860** (hereinafter '860). The issue of priority under 35 U.S.C. 102(g) and possibly 35 U.S.C. 102(f) of this single invention must be resolved.

Since the U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302), the assignee is required to state which entity is the prior inventor of the conflicting subject matter. A terminal disclaimer has no effect in this situation since the basis for refusing more than one patent is priority of invention under 35 U.S.C. 102(f) or (g) and not an extension of monopoly.

Failure to comply with this requirement will result in a holding of abandonment of this application.

Regarding **Claim 1** and dependents 2-5, these claims have similar and/or exact limitations as the claims 1-5 (see '860).

Regarding **Claim 6** and dependents 7-14, these claims have similar and/or exact limitations as the claims 6-14 (see '860).

Regarding **Claim 15** and dependents 16-20, these claims have similar and/or exact limitations as the claims 15-20 (see '860).

Regarding **Claim 21**, the claim has similar and/or exact limitations as the claims 21 (see '860).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Hilsenrath et al. (hereinafter Hilsenrath) (US 6,026,304).

Regarding **Claim 1**, Hilsenrath discloses of a cellular telephone (74) which reads on the claimed “mobile transceiver” (see col. 6, lines 6-9; Fig. 4) having:

a system for generation of location information which reads on the claimed “position information” (see col. 6, lines 6-9; col. 9, lines 10-17; Fig. 4), where the system would be inherent, and

means (74) for transmitting said position information (see col. 6, lines 6-9; col. 9, lines 10-17; Fig. 4).

Regarding **Claim 2**, Hilsenrath discloses of the invention of claim 1 wherein said system for generation of position information includes means (74) for receiving a signal from a GPS satellite (90) which reads on the claimed "satellite" (see col. 9, lines 5-17; Fig. 4).

Regarding **Claim 3**, Hilsenrath discloses of the invention of claim 2 wherein said system for generation of position information includes means (74) for receiving a Global Positioning System signal (see col. 9, lines 5-17; Fig. 4).

Regarding **Claim 4**, Hilsenrath discloses of the invention of claim 1 wherein said system for generation of position information includes means (74) for receiving a signal from an GPS satellite (90) which reads on the claimed "airborne platform" (see col. 9, lines 5-17).

Regarding **Claim 5**, Hilsenrath discloses of the invention of claim 1 wherein said means (74) for transmitting said position information includes a cellular telephone (74) which reads on the claimed "CDMA transmitter" (see col. 6, lines 6-9; col. 9, lines 10-17; Fig. 4).

Regarding **Claim 6**, Hilsenrath discloses of a base station (76) having (see Figs. 4, 10A-11B):

antenna array (80) which reads on the claimed "means" for receiving position information from a cellular telephone (74) which reads on the claimed "remote unit" and providing a received position signal in response thereto (see col. 6, lines 6-18; col. 9, lines 10-17, 20-23, Figs. 10A-11B) and

means (76) for directing a beam in response to said received position signal (see col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Fig. 7).

Regarding **Claim 7**, Hilsenrath discloses of the invention of claim 6 wherein said position information is provided at least in part by a Global Positioning System (see col. 9, lines 6-8; Fig. 4).

Regarding **Claim 8**, Hilsenrath discloses of the invention of claim 7 wherein said remote unit (74) is a cellular telephone which reads on the claimed "mobile transceiver" (see col. 6, lines 6-9; Fig. 4).

Regarding **Claim 9**, Hilsenrath discloses of the invention of claim 8 wherein said mobile transceiver (74) is a CDMA transceiver (see col. 6, lines 6-9,50-57; Fig. 4).

Regarding **Claim 10**, Hilsenrath discloses of the invention of claim 8 wherein said beam is directed to said transceiver (74) (see col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7).

Regarding **Claim 11**, Hilsenrath discloses of the invention of claim 6 wherein said means (76) for directing a beam includes an antenna array (80) which reads on the claimed "smart antenna" (see col. 6, lines 12-18; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A), where the beam is directed from the controlling of the antenna array by the signal processor and base station in which the smart antenna would be inherent.

Regarding **Claim 12**, Hilsenrath discloses of the invention of claim 11 wherein said means (76) for directing a beam includes an antenna array (80) (see col. 6, lines 12-18; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A).

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Regarding **Claim 13**, Hilsenrath discloses of the invention of claim 12 further including means (76) for driving said array to output a directed beam (see col. 6, lines 12-18; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A).

Regarding **Claim 14**, Hilsenrath discloses of the invention of claim 13 wherein said means (76) for driving includes a beamforming network (see col. 6, lines 12-18; col. 7, line 65 - col. 8, line 6; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A).

Regarding **Claim 15**, Hilsenrath discloses of a cellular telephone network which reads on the claimed “communications system” (see col. 5, line 65 - col. 6, line 5) comprising:

- a mobile transceiver (74) (see Fig. 4) having:

- a GPS system (90) for generation of position information (see col. 6, lines 6-9; col. 9, lines 6-17; Fig. 4) and

- means (74) for transmitting said position information (see col. 6, lines 6-9; col. 9, lines 10-17; Fig. 4) and

- a base station (76) (see Figs. 4, 10A) having:

- means (80) for receiving said position information and providing a received position signal in response thereto (see col. 6, lines 6-18; col. 9, lines 10-17,20-23; Figs. 10A-11B)
- and

signal processor which reads on the claimed “means” located at said base station for directing a beam in response to said received position signal (see col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Fig. 7).

Regarding **Claim 16**, Hilsenrath discloses of the invention of claim 15 wherein said GPS system (90) is GPS assisted (see col. 9, lines 5-12; Fig. 4).

Regarding **Claim 17**, Hilsenrath discloses of the invention of claim 15 wherein said means (76) for directing a beam includes a smart antenna (80) (see col. 6, lines 12-18; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A), where the beam is directed from the controlling of the antenna array by the signal processor and base station in which the smart antenna would be inherent.

Regarding **Claim 18**, Hilsenrath discloses of the invention of claim 17 wherein said means (76) for directing a beam includes an antenna array (80) (see col. 6, lines 12-18; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A).

Regarding **Claim 19**, Hilsenrath discloses of the invention of claim 18 further including means (76) for driving said array to output a directed beam (see col. 6, lines 12-18; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A).

Regarding **Claim 20**, Hilsenrath discloses of the invention of claim 19 wherein said means (76) for driving includes a beamforming network (see col. 6, lines 12-18; col. 7, line 65 - col. 8, line 6; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A).

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Regarding **Claim 21**, Hilsenrath discloses of a method for effecting directional cellular communications including the steps of:

generating position information at a mobile transceiver (74) (see col. 6, lines 6-9; col. 9, lines 6-17; Fig. 4);

transmitting said position information (see col. 6, lines 6-9; col. 9, lines 10-17; Fig. 4);

means (80) for receiving said position information at a base station (76) and providing a received position signal in response thereto (see col. 6, lines 12-18; col. 7, line 65 - col. 8, line 6; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A); and

directing a beam from said base station (76) to said mobile transceiver (74) in response to said received position signal (see col. 6, lines 12-18; col. 7, line 65 - col. 8, line 6; col. 9, lines 10-17,20-25; col. 13, lines 15-23; col. 13, line 61 - col. 14, line 8; Figs. 4, 7, 10A, 11A).

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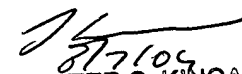
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (703) 305-8636. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WJD,JR/wjd,jr
02 August 2004


877104
LESTER G. KINCAID
PRIMARY EXAMINER